

S/089/60/009/005/012/020  
B006/B070

AUTHORS: Krasnousov, L. A., Zimakov, P. V., Volkova, Ye. V.

TITLE: Radiochemical Chlorination<sup>19</sup> of Benzene<sup>1</sup>

PERIODICAL: Atomnaya energiya, 1960, Vol. 9, No. 5, pp. 412 - 414

TEXT: The radiative chlorination of benzene was studied under standard conditions in order to study the possibility of using nuclear radiations for the production of hexachlorane.<sup>1</sup> As can be seen from the Table, the different radiations led to the formation of hexachloro-cyclohexane (HCCH) characterized by a high content of alpha phase. In addition to data on thermal, chemical (benzene peroxide), and infrared chlorination, the Table gives the following data:

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Concentration g chlorine/100g $C_6H_6$	$t^{\circ}C$	$\gamma$ -Isomer %	$\alpha$ -Isomer %	Mean energy ev
Ultraviolet (3650A)14.0	40	11.3	73.8	3 ~ 5
$\beta$ : (3.48 rad/sec, total: $2.4 \cdot 10^4$ rad)14.0	40	10.2	78.5	$0.4 \cdot 10^6$
$\gamma$ : (6.75 rad/sec, total: $2.4 \cdot 10^4$ rad)14.0	40	11.8	83.5	$1.2 \cdot 10^6$ - $1.3 \cdot 10^6$

On the contrary, the content of  $\alpha$ -isomer on chemical chlorination is only 63.7%. The chlorination was done for pure substance and for solution in  $CCl_4$ . The  $\beta$  source was  $Sr^{90}$ , and the  $\gamma$  source,  $Co^{60}$ . The radiochemical yield of the reaction was 853,000 per 100 ev; it was, however, strongly dependent on the purity of the starting material. If industrially pure benzene is used, the yield is only 130,000. The ultraviolet yielded 9000 molecules per 100 ev. The radiative chlorination rate is proportional to the square of radiation intensity (benzene without solvent). In  $CCl_4$  solution, the rate of reaction is essentially lower.

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Radiochemical Chlorination of Benzene

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Radiative chlorination of benzene is possible also at low temperatures in solid phase; the total yield increases with decreasing temperature down to  $-80^{\circ}\text{C}$ . Chlorination remains incomplete for temperatures still lower (at  $-120^{\circ}\text{C}$ , the content of tetrachlorocyclohexane reaches 58%). The effect of temperature on the isomeric composition of HCCH was also studied. While the total yield of HCCH has its maximum at  $-80^{\circ}\text{C}$ , the content of  $\alpha$ -isomer decreases from 83.5 to 38% for the fall of temperature from 40 to  $-190^{\circ}\text{C}$ . The yield of  $\gamma$ -isomer also depends on the concentration of chlorine. The formation probabilities of  $\alpha$ -,  $\beta$ -,  $\gamma$ -,  $\delta$ -, and  $\epsilon$ -isomers were calculated to be 27.8, 4.63, 25.0, 26.0, and 16.7%, respectively. There are 4 figures, 1 table, and 3 references: 1 Soviet, 1 German, and 1 Polish.

SUBMITTED: March 31, 1960

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85613

S/079/60/030/007/035/039/XX  
B001/B066

// 2/30

AUTHORS: Englin, M. A., Makarov, S. P., Dubov, S. S., Krasnousev,  
L. A., and Yakubovich, A. Ya.

TITLE: Fluorination of the Complex<sup>1</sup> of Acetonitrile<sup>1</sup> With Boron Tri-  
fluoride

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 7, pp. 2371-2374

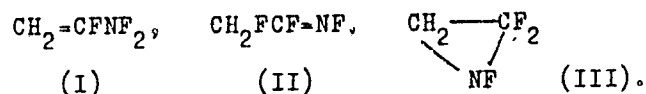
TEXT: On the basis of Refs. 1-5, the above reaction was carried out with dilute fluorine in a copper reaction vessel at room temperature.  $\text{NF}_3$ ,  $\text{CH}_3\text{CF}_3$ ,  $\text{CHF}_2\text{CN}$ , and two new products were separated by distillation (one of them boiled at  $-25$ - $-24.5^\circ\text{C}$ , the other at  $-4.8$ - $-4.7^\circ\text{C}$ ) in addition to a considerable quantity of unchanged acetonitrile. The first product, a colorless gas, is completely decomposed by alcoholic alkali lye, does not separate any iodine from alcoholic potassium iodide solution, is easily soluble in organic solvents and difficultly in water. Its elementary composition and molecular weight correspond to the formula  $\text{C}_2\text{H}_2\text{NF}_3$ . Its structure, which is probably due to the fluorination of acetonitrile, can be possibly represented by  
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Fluorination of the Complex of Acetonitrile  
With Boron Trifluoride

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the isomeric formulas (I), (II), (III):



To confirm the structure of this product its infrared spectrum was examined. There is a band characteristic of the C-H bond. One band group is caused by vibrations of the C-F bond. An intense band may be assigned to stretching vibrations of the N-F bond. These results and further spectroscopic data (Ref. 6) indicated that the structures (I) and (II) of the product  $\text{C}_2\text{H}_2\text{NF}_3$  are not confirmed spectroscopically, which fact speaks in favor of formula (III). This assumption is also supported by the presence of two bands in the infrared, which may be regarded as deformation vibrations of a three-membered ring. The structure of the products discussed may be that of fluorinated ethylene imine. The second product with the molecular weight 117 does not decolorize the aqueous-alkaline  $\text{KMnO}_4$  solution. Its molecular weight and elementary composition correspond to the formula  $\text{C}_2\text{H}_2\text{NF}_4$ . In its infrared spectrum there are absorption bands which may be assigned to the N-F and C-H bonds, and a band group appears which is due to C-F vibrations. All these properties indicate

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Fluorination of the Complex of Acetonitrile  
With Boron Trifluoride

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that the structure suggested for the product is that of  $\alpha, \alpha, N, N$ -tetra-  
fluoro ethyl amine. On fluorination of the complex  $CH_3CN \cdot BF_3$  with elemen-  
tary fluorine, 36% of acetonitrile remains unchanged. The yields of the  
fluorination products referred to the initial acetonitrile are the fol-  
lowing: for  $NF_3$  - 6.5%,  $CH_3CF_3$  - 5%,  $CH_2CF_2NF$  - 3%,  $CH_3CF_2NF_2$  - 2.5%,  
 $CHF_2CN$  - 1%. There are 12 references: 1 Soviet, 7 US, 3 British, 3 German,  
1 French, and 1 Belgian.

SUBMITTED: July 1, 1959

Card 3/3

S/844/62/000/000/074/129  
D214/D307

AUTHORS: Krasnousov, L. A., Zimakov, P. V. and Volkova, Ye. V.

TITLE: Some characteristics of the radiochlorination of benzene

SOURCE: Trudy II Vsesoyuznogo soveshchaniya po radiatsionnoy khimii. Ed. by L. S. Polak. Moscow, Izd-vo AN SSSR, 1962, 426-429

TEXT: The initiation of the chlorination of  $C_6H_6$  by  $\gamma$ ,  $\beta$ , ir and uv radiation was studied. Irradiation of chlorine in benzene led to the dissociation of  $Cl_2$ . Since  $C_6H_6$  is a good energy carrier, this additional energy causes the intermediate chlorination products to isomerize, thus changing the isomeric composition of the final product - hexachlorocyclohexane. With  $\gamma$  rays, initiation occurs throughout the solution while uv and  $\beta$  rays are absorbed in the outside layers of the solution. Regardless of the radiation used, the  $\alpha$ -isomer is the main product; its amount depends on the type of radiation ( $\gamma$  rays - 83.3%;  $\beta$  rays - 78%; uv - 73.8%; ir 67.0%). The per-

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Some characteristics of ...

S/844/62/000/000/074/129  
D214/D307

centage of the  $\eta'$  isomer depends to a lesser extent on the type of radiation used and increases as the temperature is lowered. Radio-chlorination also occurs in the solid phase but only to 1,2-dichlorocyclohexadiene-3,5. The reaction is progressive and is not a free radical process. The suggested mechanism is as follows:  $\text{Cl}_2$  dissociates into  $\text{Cl}^+$ ,  $\text{Cl}^+$  then reacts with  $\text{C}_6\text{H}_6$  to give  $\text{C}_6\text{H}_6^+\text{Cl}$ , which combines with  $\text{Cl}^-$  to form  $\text{C}_6\text{H}_6\text{Cl}_2$ . This is repeated until  $\text{C}_6\text{H}_6\text{Cl}_6$  is obtained. There are 2 figures and 1 table.

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ACC NR: AT6034055 (A) SOURCE CODE: UR/0000/66/000/000/0109/0114 3

AUTHOR: Volkova, Ye. V.; Zimakov, P. V.; Fokin, A. V.; Sorokin, A. D.; Bolikov, V. M.; Bulygian, L. A.; Skobina, A. I.; Krasnousov, L. A.

ORG: none

TITLE: Radiation polymerization of fluorocolefins

SOURCE: Simpozium po radiatsionnoy khimii polimerov. Moscow, 1964. Radiatsionnaya khimiya polimerov (Radiation chemistry of polymers); doklady simpoziuma. Moscow, Izd-vo Nauka, 1966, 109-114

TOPIC TAGS: radiation polymerization, halogenated organic compound, polymerization kinetics, reaction mechanism

ABSTRACT: Results of the authors' previously published studies on radiation polymerization of unsaturated fluorine-containing compounds are reviewed, explaining certain characteristics of the process associated with the effects of the electronegative fluorine atom, heterogeneous process conditions and radiolysis products. Tetrafluoroethylene is distinguished by its rapid polymerization under ionizing irradiation, with complete monomer conversion in three hours at  $-78^{\circ}\text{C}$  in liquid phase polymerization with 10 rad/sec radiation, and in ten minutes at  $+20^{\circ}\text{C}$ . The yield of  $7 \times 10^6$  molec/100ev is the highest known for radiation chemical reactions.

Cord 1/2

ACC NR: AT6034055

Progressive substitution of the fluorine atoms by hydrogen or chlorine or by trifluoromethyl groups reduces polymerization rate and yields: perfluoroisobutylene will not polymerize. Thus the rate of radiation polymerization decreases in the series:  $CF_2 = CF_2 > CF_2 = CFH > CF_2 = CH_2 > CFH = CH_2 > CF_2 = CFCI > CF_2 = CF-CF_3 > CF_2 = C(CF_3)_2$ . A kinetics study showed that the polymerization of tetrafluoroethylene under heterogeneous conditions proceeds by a radical mechanism, but the kinetics are more complex than in chemical polymerization due to the effect of radiolysis products. The effect of temperature on radiation bulk polymerization rates of trifluorochloroethylene, vinylidene fluoride and tetrafluoroethylene showed the rates increased to a maximum at certain temperatures: these maxima and the corresponding energies of activation are 35°C at 10 rad/sec, -6.8 kcal/mol; 50°C at 6 rad/sec, -9 kcal/mol; 70°C at 6 rad/sec, -18.7 kcal/mol, respectively. Secondary processes with the radiolysis products start to occur at higher temperatures. Orig. art. has: 2 figures and 1 table.

SUB CODE: 07/ SUBM DATE: 25Jul66/ GRID REF: 015/ OTH REF: 003

Card 2/2

FRASHKUSOVA, A.S., *Chem Tech Sci*--(dis) "Study of basic technical  
properties of <sup>electrical</sup> ~~electrical~~ insulation ceramics of ~~epoxy~~ <sup>epoxy</sup> mullite-cerium com-  
position." Nov, 1958. 21 pp with graphs (Min of Higher Education USSR,  
Moscow Order of Lenin Chemical-Technological Inst in D.I. Mendeleev), 150 co-  
pies (P1,48-58, 104)

BALKEVICH, V.L.; KRASNOUSOVA, A.S.

Dependence of certain electrophysical properties on the  $Al_2O_3$   
content in materials of mullite-corundum composition. Trudy  
MKHTI no.37:157-165 '62. (MIRA 16:12)

KRASNOUSOVA, A.S., inzh.

Studying the sintering properties of high alumina materials depending on the amount of alumina and other additives they contain. Trudy NIISTroikeramiki no.13:93-102 '58.

(MIRA 12:5)

(Refractory materials--Testing)  
(Alumina)

KRASNOUSOVA, A.S., inzh.

Studying the effect of  $Al_2O_3$  content of fully sintered mullit-  
borundum ceramics on their electrical, mechanical and thermal  
properties. Trudy NIISTroikeramiki no.13:103-124 '58.

(MIRA 12:5)

(Ceramic materials--Testing)  
(Electric insulators and insulation)  
(Alumina)

ACC NR: AP7006120

SOURCE CODE: UR/0209/67/000/001/0092/0094

AUTHOR: Krasnov, A. (Colonel; Docent; Candidate of military sciences)

ORG: none

TITLE: Means of operation and tactics of U. S. aerial reconnaissance

SOURCE: Aviatsiya i kosmonavtika, no. 1, 1967, 92-94

TOPIC TAGS: aerial reconnaissance, reconnaissance aircraft

ABSTRACT: Quoting from "Aviation Week," the author discusses the methods and aircraft used by the U.S. in aerial reconnaissance, with particular emphasis on the war in Vietnam, where the desired results have not been obtained. Despite extensive efforts, aerial reconnaissance has been unable to discover the dislocation and regrouping of the Vietcong, witness the sudden blows against the bases of the aggressors. [NC]

SUB CODE: 01/ SUBM DATE: none/ ATD PRESS: 5116

Card 1/1

UDC: none

L 44385-66

ACC NR: AN6012194 (A,N) SOURCE CODE: UR/9008/65/000/301/0003/0003

AUTHOR: Krasnov, A. (Colonel, Candidate of military sciences)

ORG: none

TITLE: Difficulties in aerial reconnaissance

SOURCE: Krasnaya zvezda, 23 Dec 65, p. 3, col. 5-7

TOPIC TAGS: aerial reconnaissance, target recognition, target discrimination, target data analysis

ABSTRACT: The author of the article reviews the opinions of western military specialists on the problems and limitations of aerial reconnaissance in modern warfare. The article stresses the limitations of purely mechanical means of aerial reconnaissance and the continuing need for human initiative and intelligence, especially in unforeseen situations, in cases of incomplete data on the adversary, or of identical targets. Aerial reconnaissance can be misled more easily if target identification and subsequent processing of the data obtained are based solely on definite, formally accepted indications. The enemy can camouflage such indications

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L 44385-66

ACC NR: AN6012194

and thus conceal important objectives, or on the other hand, he can imitate them and create a whole series of false ones. A reconnaissance officer who processes information, adds up, even if only roughly, a great number of different factors and simultaneously acquires definite experience. He alone can determine the relative importance and significance of objectives similar as to location, of type of activity, and of the relation of these items to the developing situation. Moreover, a series of reconnaissance data cannot be expressed in logical patterns or quantitatively (oral reports of crews, radio-intercepted information, etc). Such information must therefore be processed by hand before being fed to the computer. [GC]

SUB CODE: 15, 17, 19/ E.SUBM.DATE: none/

Cord

2/2

*egh*

KRASNOV, A., inzh.

Telescope for the observation of artificial satellites. NTO  
4 no.8:62 Ag '62. (MIRA 15:8)  
(Telescope)

KRASNOV, A., inzh.

From a "shelf" to "TU-124" the jet plane. IUn.tekh. 7 no.2:9,14,29,44.  
47,58,64 F '63. (MIRA 16:4)

(Airplanes)

KRASNOV, A. A.

PA 153T25

USSR/Engineering - Electrification Nov 49  
Agriculture, Electrification  
of

"Complex Electrification of Agricultural Production,"  
A. A. Krasnov, Cand Tech Sci, All-Union Inst for  
Electrification of Agr, 7 pp

"Elektrichestvo" No 11

Examines features and explains importance of electri-  
fication in development of Soviet agriculture. In-  
dicates factors characterizing its effectiveness.  
Examples show how to evaluate complex electrification  
for specific cases. Submitted 17 Aug 49.

153T25

KRASNOV, A.A.

PHASE I BOOK EXPLOITATION

SOV/4544

Ivanov, V.V., V.Yu. Volgin, A.A. Krasnov, and N.V. Lizunov

Talliy; osnovnyye cherty geokhimii i mineralologii, geneticheskiye tipy mestorozhdeniy i geokhimicheskkiye provintsii (Thallium; Basic Features of Its Geochemistry and Mineralogy, Genetic Types of Deposits, and Geochemical Provinces) Moscow, Izd-vo AN SSSR, 1960. 154 p. Errata slip inserted. 3,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut mineralologii, geokhimii i kristalloghimii redkikh elementov.

Chief Ed.: K.A. Vlasov, Corresponding Member; Resp. Ed.: A.A. Beus, Doctor of Geological and Mineralogical Sciences; Ed. of Publishing House: S.M. Simkin; Tech. Ed.: G.S. Simkina.

PURPOSE: This book is intended for geochemists and mineralogists.

COVERAGE: This book is the first Soviet publication on the geology and geochemistry of thallium. Much of the data published here was accumulated by the IMGRE AN SSSR - Institute mineralologii, geokhimii i kristalloghimii redkikh elementov AN SSSR

Card 1/4

Thallium: Basic Features of its Geochemistry (Cont.)

SOV/4544

(Institute of the Mineralogy, Geochemistry and Crystallochemistry of Rare Earth Elements, AS USSR) in the process of studying the rare earth metal deposits of the Soviet Union. This institute carried out the analysis for thallium content of a great number of types of minerals and ores (especially the sulfides and the sulfo salts) from many deposits of different genesis. Data are given on tens of thousands of semiquantitative and quantitative determinations of thallium in monomineral, lump and average ore samples made at the spektral'naya laboratoriya (Spectral Analysis Laboratory) of the institute. The monomineralic fractions were sorted out with a type MBS-1 binocular microscope, and when necessary, the selected fractions were microscopically checked for purity. The spectral determinations of thallium were made by N.V. Lizunov and L.I. Sazhina, and the chemical and polarographic determinations by A.A. Rozbianskaya, Z.M. Piskova, and Ye.N. Zakharova. The following sections of the book were composed by the authors as indicated: Introduction by V.V. Ivanov, Ch. I by V.Yu. Volgin and V.V. Ivanov, Ch. II by A.A. Krasnov and V.Yu. Volgin, Ch. III by V.Yu. Volgin and V.V. Ivanov (the part on the distribution of thallium in rock was written by A.A. Krasnov), Chs. IV and V by V.V. Ivanov. (V.Yu. Volgin collaborated in writing the section on the "Distribution of thallium in certain foreign deposits"). The spectral analysis methods used were described by N.V. Lizunov, and the chemical methods for the determination of thallium by A.A. Rozbianskaya and Z.M. Piskova. The authors thank G.B. Kosov for supplying material on the thallium economy, and the following for helping prepare the manuscript: A.A. Beus,

Card 2/

Thallium: Basic Features of its Geochemistry (Cont.)

N.I. Vlodavets, K.F. Kuznetsov, K.A. Nenashevich, F.I. Vol'fson, A.D. Kalenov,  
and V.V. Shcherbina. There are 265 references: 155 Soviet, 53 English, 45  
German, 4 Italian, 3 Polish, 2 French, 2 Swedish, and 1 Hungarian.

001/4544

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Card 3/4

KRASNOV, A.A.

AUTHOR: Sergeyev, A. S., Docent

105-56-4-32/37

TITLE: Dissertations (Dissertatsii)

PERIODICAL: Elektrichestvo, 1956, Nr 4, pp. 91 - 92 (USSR)

ABSTRACT: For the Degree of Candidate of Technical Sciences, 1947-1954. At the All Union Institutes for the Mechanization and Electrification of Agriculture (Vsesoyuznyye instituty mekhanizatsii i elektrifikatsii sel'skogo khozyaystva) M. Ye. Kulik, on July 1, 1947: "Electric Illumination of Agricultural Night Work in the Fields". Official opponents were: Doctor of Technical Sciences Professor S. P. Vostroknutov, Candidate of Technical Sciences B. I. Lugovskoy and Candidate of Agricultural Sciences M. A. Sazanov. A. A. Krasnov, on August 5, 1947: "The Structure of the Energy Consumption and the Ways of its Rationalization in the Case of Complex Electrification of the Kholkhoses by Small Electric Power Stations". Official opponents were: Doctor of Technical Sciences Professor M. G. Yevreinov and Candidate of Agricultural Sciences I. A. Budzko. Kh. T. Tasbulatov, on May 24, 1949: "Rational Electric Energy Distribution Systems in the Agricultural Areas of the Kazakh

Card 1/5



Dissertations

105-58-4-32/37

SSR on the Basis of Their Energetic Classification". Official opponents were: Professor V. M. Stepanov and Candidate of Agricultural Sciences A. G. Zakharin.

L. G. Rabochiy, on February 13, 1951: "Investigation of the Operation Process in Magnetic Ignitors of Tractors When Starting the Engines". Official opponents were: Doctor of Agricultural Sciences Professor I. T. Kuznetsov and Candidate of Technical Sciences Docent Yu. M. Galkin.

A. P. Zlatkovskiy, on February 27, 1951: "The Carrying out of the Compound Excitation of Alternators in Electric Power Stations in the Country". Official opponents were: Doctor of Technical Sciences Professor A. G. Iosif'yan, Professor V. M. Stepanov and Candidate of Technical Sciences S. B. Yudit'skiy.

D. M. Bystritskiy, on June 10, 1952: "Problems of the Synchronization of Generators in Wind-Driven Rural Electric Power Stations Operating Within the Energy System". Official opponents were: Professor S. A. Burdakov and Doctor of Technical Sciences Professor Ye. M. Petrov.

B. V. Shirmov, on June 19, 1951: "High-Voltage Dispatch Communication Through Rural High-Voltage Supply Lines of

Card 2/5

Dissertations

145-58-4-32/37

Electric Systems". Official opponents were: Professor S. A. Burguchov, Doctor of Technical Sciences Professor N. A. Sazonov and Candidate of Technical Sciences N. A. Vl'yankovskiy.

A. I. Yakobs, on June 19, 1951: "Investigation of the Electromagnetic Processes of a Transformer Stabilizer With Three Windings for Self-Controlled Alternators of Rural Electric Power Stations". Official opponents were: Doctor of Technical Sciences Professor A. M. Larionov and Candidate of Technical Sciences A. M. Utevskiy.

P. M. Urvachev, on April 29, 1952: "Investigation of the Electrical Characteristics of Stationary Agricultural Machines With Electric Drive". Official opponents were: Doctor of Technical Sciences Professor N. A. Sazonov, Candidate of Technical Sciences Docent G. I. Nagarov and Candidate of Technical Sciences V. S. Krasnov.

B. V. Uskov, on June 17, 1952: "Investigation of the Earthening of Electro-Tractor Aggregates". Official opponents were: Professor S. A. Burguchev and Doctor of Technical Sciences L. Ye.Ebin.

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Dissertations

165-58-4-32/37

N. M. Zul', on November 16, 1952: "Problems of the Automatic Reconnection in Rural Electric Plants". Official opponents were: Doctor of Technical Sciences Professor M. F. Poyarkov and Doctor of Technical Sciences Professor L. Ye. Ehin.

Ye. N. Lebedeva, on June 9, 1953: "The Use of Non-Linear Elements in Automation Schemes of Rural Electric Plants and the Elaboration of a Contactless Voltage Relay". Official opponents were: Doctor of Technical Sciences Professor M. A. Babikov and Professor V. M. Stepanov.

S. Ye. Kaysel', on March 30, 1954: "Investigation of the Stability of Parallel Operation of a Wind Driven Electric Power Station With Idle Accumulator in a System With Compensative Capacity". Official opponents were: Doctor of Technical Sciences Professor Ye. M. Fateyev, Candidate of Technical Sciences D. M. Bystritskiy and Candidate of Technical Sciences V. R. Selterov.

G. S. Agrachev, on April 6, 1954: "Investigation of the Drive of an Electro-Tractor With a Multispeed Induction Motor". Official opponents were: "Member of the Academy VASKHNIL",

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Dissertations

105-58-4-32/37

M. Z. Yevreinov and Doctor of Technical Sciences N. V. Gorokhov.

K. Ye. Rostomyan, on April 27, 1954: " Problems of the Parallel Operation of a Rural Hydroelectric Power Station With a Large Scale Energy System on Conditions as Present in the Armenian SSR". Official opponents were: Doctor of Technical Sciences Professor D. A. Gorodskiy and Candidate of Technical Sciences Ye. L. Shats.

AVAILABLE: Library of Congress

1. Electrical engineering-Reports

Card 5/5

KRASNOV, A. F., Cand Med Sci -- (diss) "Transplantation of tendons in flaccid paralysis of the musculus quadriceps femoris." Kuybyshev, 1958. 16 pp (Min of Health RSFSR, Kuybyshev State Med Inst), 220 copies (KL, 18-58, 103)

-112-

KRASNOV, A.F.

Our modification of tendon transplantation in paralysis of the quadriceps extensor of the leg. Ortop.travm. i protez. 20 no.8: 56-59 Ag '59. (MIRA 12:11)

1. Iz ortopedicheskogo otdeleniya (zav. - prof. A.P. Yevstropov) kafedry gosital'noy khirurgii (zav. - prof. A.M. Aminev) Kuybyshevskogo meditsinskogo instituta (dir. - prof. T.Ye. Yeroshevskiy). (LEG, muscles & tendons)

KRASNOV. A.F., kand. med. nauk (Kuybyshev obl., p/o 21. Pervyy proyezd, d.2, kv.7)

Surgical treatment of lateral distortions in the knee joint. Vest. khir.  
91 no.11:52-57 N '63. (MIRA 17:12)

1. Iz ortopedicheskogo otdeleniya gosspital'noy khirurgicheskoy kliniki  
(zav. - prof. A.M.Aminev) Kuybyshevskogo meditsinskogo instituta.

KRASNOV, A.G., aspirant

Methods for fixing transplantable tendons in paralysis of the  
musculus quadriceps femoris. Trudy Kuib.med.inst. 11:25-32 '60.  
(MIRA 15:8)

1. Iz ortopedicheskogo otdeleniya (zav. otdeleniyem prof. A.P.  
Yevstropov) i kafedry gosital'noy khirurgii (zav. kafedroy prof.  
A.M.Aminev) Kuybyshevskogo meditsinskogo instituta.  
(TENDONS--TRANSPLANTATION) (FEMROAL MUSCLE) (POLIOMYELITIS)



KUZNETSOV, N.D., inzh.; OBOROTISTOVA, M.L., inzh.; YERMOLAYEV, A.U., inzh.  
YAGUNOV, A.A., inzh.; KRASNOV, A.I.; RYSIN, V.I., inzh.

Exchange of experience among the enterprises of economic  
councils. Torf. prom. 38 no.7:31-34 '61. (MIRA 14:12)

1. Syavskiy lesokhimbkombinat Gor'kovskoy oblasti (for  
Kuznetsov). 2. Shaturaskiy torfotrest Mosoblsovnarkhoza (for  
Oborotistova). 3. Predpriyatiye Osintorf sovnarkhoza BSSR  
(for Yermolayev). 4. Monetnoye torfopredpriyatiye Sverdlovskogo  
sovnarkhoza (for Yagunov). 5. Maksikha-Zybinskoye predpriyatiye  
Yaroslavskogo sovnarkhoza (for Krasnov). 6. Torfopredpriyatiye  
Radovitskiy mokh Mosoblsovnarkhoza (for Rysin).  
(Peat machinery)

*KRASNOV, A.I.*

Subject : USSR/Electricity AID P - 2920  
Card 1/1 Pub. 26 - 17/32  
Authors : Davidov, A. A. and A. I. Krasnov, Engs.  
Title : Butterfly type blower for continuous blowing  
Periodical : Elek.sta., 7, 49-51, J1 1955  
Abstract : The design and construction of evaporators are explained in detail. Results of experiments made with butterfly type blowers are given in a table.  
Institution : None  
Submitted : No date



KRASNOV, A.I., inzh.; RAGULIN, N.F., inzh.

Use of breather collectors in once-through boiler manufacture.  
Energomashinostroenie 4 no.2:1-5 F '58. (MIRA 11:4)  
(Boilers)

~~IRASHOV, Aleksandr Ivanovich~~; KATRENKO, D.A., redaktor; NEGRIMOVSKAYA, R.A.,  
tekhnicheskiiy redaktor

[Is perpetual motion possible?] Vozmozhno li vechnyy dvigatel'?  
Moskva, Gos. izd-vo tekhniko-teoret. lit-ry, 1956. 62 p. (Nauchno-  
prosvetitel'naya biblioteka, no.14) (MLRA 10:3)  
(Perpetual motion)

KRASNOV, Aleksandr Ivanovich; KATRENKO, D.A., red.; BRUDNO, K.F., tekhn.red.

[Gyroscope and its uses] Volchok i primeneniye ego svoistv. Moskva,  
Gos. izd-vo tekhniko-teoret. lit-ry, 1958. 63 p. (Nauchno-populiarnaya  
biblioteka, no.100) (MIRA 11:4)  
(Gyroscope)

KRASNOV, A.

Corpuscular gyroscope. Un. tekhn. 5 no. 12:30-32 D '60.

(Gyroscope)

(MIRA 14:1)

KRASNOV, A., inzh.

Highly educated top. Znan.sila 36 no.3:16-18 Mr '61. (MIRA 14:3)  
(Gyroscope)



KRASNOV, A.I.

Composition of structural and correlation schemes based on  
materials of large-scale aeromagnetic surveying. Vop.razved.  
geofiz. no.4:103-111 '64.

(MIRA 19:1)

KRASNOV, A.I.

Structure of the Aldan Shield basement in the light of the geological interpretation of the data of large-scale aeromagnetic surveying.  
Sov. geol. 7 no.11:61-71 N '64. (MIRA 18:2)

1. Vsesoyuznyy institut razvedochnoy geofiziki.

KRASNOV, A.I.; OSIPOV, I.Z., redaktor; YERSHOV, P.R., redaktor; TROFIMOV,  
~~A.V.;~~ tekhnicheskiiy redaktor.

[Drop of gasoline] Kaplia benzina. Moskva, Gos.nauchno-tekhnicheskoe  
izd-vo neftianoi i gorno-toplivnoi lit-ry, 1955. 47 p. (MIRA 8:4)  
(Gasoline)

KRASNOV, Aleksandr Ivanovich; KLEYMEHOVA, K.P., vedushchiy red.;  
POLOSINA, A.S., tekhn.red.

[A drop of gasoline] Kaplia benzina. Izd.2., ispr. i dop.  
Moskva, Gos.nauchno-tekhn.isd-vo neft. i gorno-toplivnoi  
lit-ry, 1959. 52 p. (MIRA 12:7)  
(Gasoline)

KRASNOV, Aleksandr Ivanovich; FEDCHENKO, V.. red.; MIKHAYLOVSKAYA, N.,  
tekhn.red.

[Book about oil] Kniga o nef'ti. Moskva, Izd-vo TsK VLKSM  
"Molodaia gvardiia," 1959. 175 p. (MIRA 12:12)  
(Petroleum)

KRASNOV, A. I.

807/392  
307/7-4-5

PLANE I NO. 1

Abdullayev, R. M. Laboratory of aeromagnetic

Survey, tom 8: Materialy VII Vsesoyuznogo nauchnoissledovaniya aeromagnitnykh i aerofotogeologicheskikh konferentsiy, 1956 g. (Materials of the VII All-Union Interdepartmental Conference on Aerial Surveying, 25 November-1 December 1956) Moscow, Gosgeolizdat, 1959. 300 p. 5,000 copies printed.

Ed. of Publishing House: V. O. Filatov; Tech. Ed.: O. A. Gurova; Editorial Commission: E. O. Kall', Corresponding Member, Academy of Sciences USSR; A. A. Logachev, V. P. Mironovskiy (Resp. Ed.), and E. E. Sobolev.

NOTE: This publication is intended for photogrammetrists, geologists, geographers, and other scientific and technical personnel concerned with aerial photography.

CONTENTS: This issue of the Transactions of the Laboratory of Aerial Surveying Methods contains the second part of materials presented at the VII All-Union Interdepartmental Conference on Aerial Surveying which took place in Leningrad, November 25 through December 1, 1956. Articles treat problems dealing with the execution and application of aerial survey methods in geological, geomorphological, and geophysical investigations. Special attention is directed to aerial survey methods in geological and geomorphological mapping and geophysical work under different conditions. The techniques of joint airborne magnetic prospecting and aerial photography are described. References accompany individual articles.

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Krasnov, A. I. [All-Union Scientific Research Institute of Geophysical Prospecting Methods]. Techniques and Results of a Regional Aeromagnetic Survey of the Southern Russian Plateau (Results of the Study of Local Magnetic Anomalies) Using Magnetometric Continuation Methods [Aerial Photo-Ties]	267
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Solov'yev, O. M. [All-Union Scientific Research Institute of Geophysical Prospecting Methods]. Results from the Aeromagnetic Survey of Caspian Region	280
Voronov, Ya. G. [Kashino-Issledovatel'skiy Institut - Kashino Geophysical Prospecting Trust]. Preliminary Results of the Aeromagnetic Survey in the Eastern Part of Turkmenistan Carried Out in Connection with the Exploration of Oil-bearing Structures	289
Sobolev, E. I. [All-Union Scientific Research Institute of Geophysical Prospecting Methods]. Application of Aerial-Survey Methods and Equipment to Geophysical Oil Prospecting	293
Pliginskii, V. B., O. M. Solov'yev, and A. A. Saturskiy [Laboratory of Aerial-Survey Methods, Academy of Sciences, USSR]. An Integrated [Combined] Use of Aerial Photography and Aeromagnetic Prospecting in Geological Explorations	298

AVAILABILITY: Library of Congress

Card 10/10

AC/Am/ce  
7-80-60

KRASNOV, A.I.

Genetic features of uranium mineralization in Mesozoic clay  
shales. Vop.rud.geofiz. no.3:60-67 '61. (MIRA 15:8)  
(Uranium ores) (Prospecting--Geophysical methods)

S/169/62/000/008/001/090  
E202/E192

AUTHORS: Krasnov, A.I., and Mukareva, G.B.

TITLE: The age of thorite from the Ulkan intrusive massif  
(south eastern perimeter of the Aldan shield)

PERIODICAL: Referativnyy zhurnal, Geofizika, no.8, 1962, 8,  
abstract 8 A 39. (In the Symposium: "Vopr. rudn.  
geofiz." no.3, M., Gosgeoltekhizdat, 1961, 95-98).

TEXT: The data for the determination of the absolute age of  
thorite present in the form of fine impregnations and streaks in  
the granites of the Ulkan massif are given. The thorite was formed  
during the final stages of the post-volcanic process connected with  
the formation of the Ulkan massif. The content of thorium  
( $21.3 \pm 2\%$ ), radium ( $1257 \times 10^{-10} \pm 2\%$ ) and vanadium calculated  
from radium ( $0.37 \pm 2\%$ ) was determined radiochemically. The  
content of lead was 0.100%. The age calculation was determined  
from the total lead, assuming that the latter was entirely of  
radiogenic character. The authors confirmed that the error of  
these determinations may vary within the intervals of 3%. In this  
way the age of thorite can be determined as  $(10^4 \pm 5) \times 10^6$  yrs.  
Card 1/2



The age of thorite from the Ulkan... S/169/62/000/008/001/090  
E202/E192

The isotopic analysis of the lead isolated from the thorite was also carried out, but  $Pb^{204}$  was not determined. The correction for the non-radiogenic lead was introduced on the basis of the data about the mean isotopic composition of the galenites of the Alpine epoch, the values of age obtained from the gross Pb content and  $\gamma^{235}$  in the sample. Taking into consideration the correction, the age calculated according to the formula was  $85 \times 10^6$  yrs. Nomograms of Melent'yev for the above data give a value of  $95 \times 10^6$  yrs. The authors take as most probable the figure of  $90 \times 10^6$  yrs. For thorite the most probable age should be given as that calculated from  $Pb^{208}$ . According to Melent'yev nomograms, this figure should read  $96 \times 10^6$  yrs.

[Abstractor's note: Complete translation.]

Card 2/2

FRANOV, A.K., assistant

Hyaline membranes in the lungs of newborn infants. Sbor. nauch.  
trud. Ivan. gos. med. inst. no. 28:61-68 \* 63 (MIRA 19:1)

1. Iz kafedry sudobnoy meditsiny (zav. - dotsent S.N. Bakulev)  
i kafedry patol. fizicheskoy anatomii (zav. - dotsent O.N. Ne-  
chayeva) Ivanovskogo gosudarstvennogo meditsinskogo instituta  
(rektor - dotsent Ya.M. Romanov).

KRASNOV, A.K., assistant; SERZHANTOV, V.S., student

Characteristics of medicolegal expertise on the carcasses of fetuses and newborn infants. Sbor. nauch. trud. Ivan. gos. med. inst. no. 28:213-220 ' 63.

1. Iz kafedry sudebnoy meditsiny ( zav. kafedroy - dotsent S.N. Bakulev) Ivanovskogo gosudarstvennogo meditsinskogo instituta (rektor - dotsent Ya.M. Romanov).

YEFIMOV, Yu.P.; KRASNOV, A.K.

Expertise on self-strangulation. Sud.-med. ekspert. 6 no.1:52-  
53 Ja-Mr '63. (MIRA 16:2)

1. Byuro sudebnomeditsinskoy ekspertizy (nachal'nik - dotsent  
S.N. Bakulev) Ivanovskogo oblastnogo otdela zdravookhraneniya.  
(MEDICAL JURISPRUDENCE) (STRANGLING)

KRASNOV, A.K.

Serafim Nikolaevich Bakulev, 1904-. Ind.-med. eksport. 8 no.1:60-61  
Ja-Mr '65. (MIRA 18:5)

USSR / Farm Animals. Wild Animals.

Q-4

Abs Jour : Ref hur - Biol., No 10, 1958, No 45246

Author : Perel'dik, N. Sh.; Argutinskaya, S. V.; Krasnov, A. M.;  
Bobrov, Ye. P.

Title : The Feeding of Fur-Bearing Animals with Acid-Preserved Fish  
Feeds.

Orig Pub : Karakulevodstvo i zverovodstvo, 1957, No. 4, 33-38

Abstract : In two experiments in feeding fish to young foxes and mink, carried out from both the scientific and economic viewpoint, it was established that fish preserved by sulfuric acid and neutralized by chalk can be fed to the pup foxes up to 45%, and to the young mink up to 30%, of the total nutritiousness of the aggregate group of the meat-fish feeds, without harm to the health of the animals and detriment to the quality of their fur. The fish and fish waste preserved by formic

Card 1/2

30

USSR / Farm Animals. Wild Animals.

Q-4

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 45246

Abstract : acid can be fed to the animals, without its neutralization  
by chalk, up to the amount of 30 percent of the meat-fish  
group of feeds.

Card 2/2

L 46660-66 EWP(e)/EWT(m)/EWP(w)/I/EWP(t)/ETI/EWP(k) IJP(c) JD  
 ACC NR: AP6009568 (N) SOURCE CODE: UR/0226/65/000/011/0001/0008

42  
41  
B

AUTHOR: Sleptsova, N. P.; Krasnov, A. N.; Ivashchenko, V. V.

ORG: Institute for the Study of Materials, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR); Kiev Polytechnic Institute (Kiyevskiy ordena Lenina politekhnicheskiiy institut)

21 18

TITLE: Production and properties of spherical-particle copper powders and copper-powder products

SOURCE: Poroshkovaya metallurgiya, no. 11, 1965, 1-8

TOPIC TAGS: spheric metal powder, copper, powder metal production, powder metal compaction

ABSTRACT: Copper powders obtained by the method of plasma-jet atomization as well as by the method of the spheroidization of nonspherical powder particles through fusion in an inert filler have particles of a more uniformly spherical shape and cleaner and smoother surface than the powders produced by the air- or water-atomization methods. The plasma-jet atomization method moreover makes it possible to utilize copper-wire wastes for the production of spherical-particle powder. This method yields a high percentage of spherical particles and

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L 46660-66

ACC NR: AP6009568

can be adjusted to obtain the desired quantitative yield of specific particle sizes. As for the method of fusion in an inert filler (mixing of reduced Cu powder with  $\text{CaCO}_3$  and heating of the mixture to  $1200^\circ\text{C}$ ), it produces a 100% yield of spherical particles of a nearly uniform size. An investigation of the process of powder-metal forming utilizing spherical particles of this kind has shown that pressing results in products of the desired porosity, but involves deformation of particles. For freely poured powder residual porosity is 40-50%. Vibration compacting serves to reduce porosity to 35% and is particularly effective in the fabrication of thin-walled intricate shapes. The vibration compacting of different particle sizes involves different regimes of frequency and amplitude. The process of vibration compacting may be intensified by applying small static loads. An investigation of the materials obtained by sintering powders at  $1000^\circ\text{C}$  following the addition of 0.3% phosphorus has shown that their strength characteristics are independent of the method of powder production (plasma-jet atomization or fusion in inert filler). Bending strength was found to be dependent on particle size, increasing from 35 to 55  $\text{kg/mm}^2$  with decrease in particle size from 0.3 to 0.05 mm. Orig. art. has: 5 figures and 5 tables.

SUB CODE: 11, 13/ SUBM DATE: 08May65/ ORIG REF: 011/ OTH REF: 001

Card

2/2 *egh*

KRASNOV, Andrey Nikolayevich; MIL'KOVA, F.N., professor, redaktor; KUMES,  
S.N., redaktor; NOGINA, N.I., tekhnicheskiiy redaktor

[In Asia's tropics] Pod tropikami Azii. Moskva, Gos. izd-vo geogr.  
lit-ry, 1956. 263 p. (MIRA 9:12)  
(Asia--Description and travel)

KRASNOV, A.P.

~~Economic water heater.~~ Nauka i pered.op. v sel'khoz. 6 no.11:31-32  
N '56. (MIRA 10:1)

(Water heaters) (Stock and stockbreeding)

ORESHKIN, V.D.; KRASNOV, A.N.; REPKIN, V.D.; POKOLOV, V.M.; FUKS, Yu.B.

Time length of holding large castings in the mold. Trudy Khim.-  
met.inst.Sib.otd.AN SSSR no.14:139-145 '60. (MIRA 14:10)  
(Founding)

ORESHKIN, V.D.; KRASNOV, A.N.; REPKIN, V.D.; SOKOLOV, V.M.; FUKS, Yu.B.

Forced cooling of large castings. Trudy Khim.-met.inst.Sib.otd.AN SSSR  
no.14:147-151 '60. (MIRA 14:10)  
(Founding) (Thermal stresses)

L 44017-66 EWT(1)/EWP(e)/EWI(m)/EWP(t)/ETI/EWP(k) IJP(c) JD/JG/AT

ACC NR: AP6007280 (A) SOURCE CODE: UR/0226/66/000/002/0001/0005

AUTHOR: Krasnov, A. N.

ORG: Institute of Material Study Problems, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Plasma atomization of tungsten

SOURCE: Poroshkovaya metallurgiya, no. 2, 1966, 1-5

TOPIC TAGS: tungsten, powder metallurgy, particle size, granule formation, atomization, plasma flow, plasma device

ABSTRACT: Conditions for the preparation of different shaped tungsten powder particles by the plasma stream method and the effect of varying operating conditions on the granulometric structure of the powders were determined. The powder particles became more spherical as the distance between the jet and the surface of the cooling medium is increased. Spherical and "sombbrero" shaped particles (50-1000 mkm diameter) were obtained when water was used as a coolant; but, the latter were not obtainable with oil as coolant, shapeless beads being formed instead. As current strength and arc gap were increased the amount of coarse powder increased and the range of the particle size distribution widened.

Card 1/2

L 44017-66

ACC NR: AP6007280

As the delivery of plasma-forming gas and rate of material input into the stream increased to 2.16 m<sup>3</sup>/min and 2.2 m/min, respectively, the pulverizing effect increased--the maximum on the coarse particle size distribution curve shifted rapidly toward fine fractions and the distribution range was narrowed. Further increases in the delivery and feed rates resulted in a reverse shift of the maximum in the direction of coarse fractions. Orig. art. has: 4 figures and 3 tables.

SUB CODE: 11, 13/ SUBM DATE: 04Apr65/ ORIG REF: 002/ OTH REF: 002

Card 2/2 *LC*

L 26591-66 EWT(1)/EWT(m) IJP(c) JD/JH

ACC NR. AP6011343

SOURCE CODE: UR/0226/66/000/003/0001/0006

AUTHORS: Sharivker, S. Yu.; Krasnov, A. N.

ORG: Institute for Materials Behavior Problems, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Possibility of obtaining large spherical particles by introducing a fine powder into a plasma beam in a direction perpendicular to the latter

SOURCE: Poroshkovaya metallurgiya, no. 3, 1966, 1-6

TOPIC TAGS: plasma, plasma beam, plasma jet, ideal fluid, aluminum oxide

ABSTRACT: A theoretical investigation of the mechanism of forming large spherical particles by directing a stream of fine powder into a plasma jet at right angles to the latter is presented. The investigation is based on the equations of motion of droplets in gases, derived by Yu. L. Khait (Sb. Kinetika i termodinamika khimicheskikh reaktsiy v nizkoterperaturnoy plazme, Izd-vo Nauka, M., 1965, 167), and on the equation of continuity of ideal liquids. The equation

$$\frac{V_2}{V_1} = 1,8 \lg \left( 1 - \frac{0,00385}{r^2 Q} \right)$$

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L 26591-66

ACC NR: AP6011343

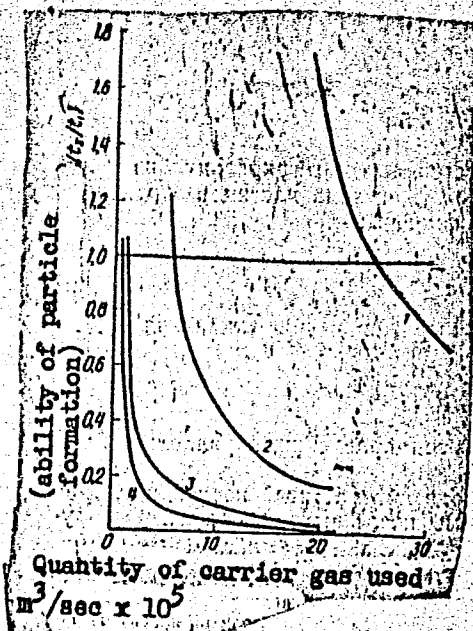
has been derived for the possibility of particle formation. Here  $r$  is the size of particle,  $Q$  is the quantity of carrier gas used,  $t_1$  is the time spent by the particle in the nozzle, and  $t_2$  the time required by the particle to reach the collector wall opposite the nozzle. A graph of  $t_2/t_1$  versus  $Q$  for different particle sizes  $r$  is presented (see Fig. 1). The theoretical conclusions were tested experimentally on aluminum oxide powder. It was found that for  $Q = 12.1 \times 10^{-5}$  m<sup>2</sup>/sec ( $t_2/t_1 = 0.31$ ) practically all the powder was consolidated into particles of 0.3 to 1 mm. A schematic of the experimental apparatus and a photograph of the  $Al_2O_3$  particles are presented.

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L 26591-66

ACC NR: AP6011343

Fig. 1. Effect of the quantity of carrier gas and particle size on the likelihood of particle formation. Particle size: 1 - 10 millimicrons; 2 - 20 millimicrons; 3 - 40 millimicrons; 4 - 60 millimicrons.



Orig. art. has: 3 graphs.

SUB CODE: 20 / SUBM DATE: 25Nov65/ ORIG REF: 005

Card 3/3 B.L.G.

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

1. *Chlorophyll a*

8/0226/06/000/001/0070/008

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

...and the

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**ABSTRACT:** The article is a survey dealing with the technical applications of a low-temperature arc plasma. A 90° plasma obtained by means of electric arcs. The existing types of plasmatrons are illustrated and their operation is described. The composition of the plasma jet is discussed in terms of its two main parameters, the enthalpy and the temperature. Fields of application of the arc plasma jet in powder metallurgy are reviewed, such as nitriding of titanium and synthesis of carbonitrides in the case of nitrogen plasma, sinterization of oxide and carbide powder particles, fusion of powders of high-melting metals and compounds, etc. The technique of spray coating by means of the arc plasma jet is discussed at length, and its advantages are listed. Orig. int. lang. 5 figures not labeled.

Card 1/2

D 12678-65

ACCESSION NR: AP800444

ASSOCIATION: MATERIAL SCIENCE INSTITUTE, AN U.S.S.R. (Material Science Institute, AN U.S.S.R.)

SUBMITTED: 2486003

ENGINE: 00

SUB CODE: MM-12

NO REF SOVI: 004

OTHER: 007

Card 2/2

SLEPTSOVA. N.P.; KRASNOV, A.N.; IVASHCHENKO, V.V.

Preparation and properties of spherical copper powders and products made from them. Porosh.met. 5 no.11:1-8 N '65.

(MIRA 18:12)

1. Institut problem materialovedeniya AN UkrSSR i Kiyevskiy ordena Lenina politekhnicheskoy institut. Submitted May 8, 1965.

BURYKINA, A.L.; KRASNOV, A.N.; YEVTUSHOK, T.M.

Plasma and diffusion coatings on graphite. *Ferosh.mst.* 5  
no.12:38-44 D '65. (MIRA 19:1)

1. Institut problem materialovedeniya AN UkrSSR. Submitted  
March 29, 1965.



L 58968-65 RT(n)-2/RTA(s)-2/RT(l)/RT(m)/RT(k)/RT(p)/RT(s)/RT(b)/RT(e)/  
 RT(c) TJP(c) /RT(m)/RT(k)/RT(p)/RT(s)/RT(b)/RT(e)/  
 ACCESSION NR: AP501/AT

UR/0370/65/000/003/0070/0072  
 6691621.762.001

AUTHOR: Krasnov, A. N. (Kiev); Samonov, G. V. (Kiev); Sleptsov, V. M. (Kiev)

TITLE: Production of copper, molybdenum and tungsten powders by atomization with a plasma jet

SOURCE: AN SSSR. Izvestiya. Metall., no. 3, 1965, 70-72

TOPIC TAGS: copper powder, molybdenum powder, tungsten powder, spherical particle powder, plasma jet atomization

ABSTRACT: The production of copper, molybdenum, and tungsten powders with spherical particles 100-400  $\mu$  in size by means of plasma-jet atomization has been investigated. Metal wire 1 mm in diameter was fed at a speed of 7.0 m/min and the plasma-forming gas (argon) was fed under a pressure of 1.2 atm at a rate of 35 l/min. The arc gap was 7 mm. Atomized powders were cooled in water or engine oil. The distance between the torch nozzle and the cooling medium was varied from 120 to 1500 mm. Copper and molybdenum powders with spherical particles were produced with cooling in water or oil, regardless of the distance between the torch nozzle and the cooling medium. Tungsten powders with spherical particles were obtained when the torch

Card 1/2



L 58968-65

ACCESSION NR: AP5017471

nozzle was more than 1200 mm distant from the cooling medium, regardless of the nature of the cooling medium. At smaller distances the powder particles had irregular shapes. Orig. acc. has: 3 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 24 Mar 61

NO. REF. SOV: 001

ENCL: 00

SUB. CODE: MM, ME

OTHER: 002

ATD. PRESS: 4048

Card

2/2

(A) L 11907-66 EWT(d)/EWP(a)/EWT(m)/ETC(F)/ENG(m)/EWP(v)/T/EWP(t)/EWP(L)  
 ACC NR: AP6001921 EWP(h)/EWP(b)/EWP(1)/ UR/0294/65/003/006/0940/0942 81  
 ETC(m) LJP(o) JD/WW/JG/AT/WH 44 55  
 AUTHOR: Burykina, A.L.; Dubovik, T.V.; Yevtushok, T.M.; Krasnov, A.N. 44 55 78  
 ORG: Institute for the Study of Materials AN UkrSSR (Institut problem materialovedeniya Akademii nauk UkrSSR) 49 55  
 TITLE: Aluminum nitride coatings on graphite 15, 44, 55  
 SOURCE: Teplofizika vysokikh temperatur, v.3, no.6, 1965, 940-942  
 TOPIC TAGS: metal coating, aluminum nitride, graphite  
 ABSTRACT: The article studies the possibility of obtaining aluminum nitride coatings on graphite by the method of flame spraying of the aluminum with subsequent nitriding of the metallic layer. The spraying was carried out in a standard UPU-2M plasma unit using a wire as an open electrode. The plasma jet melts the metal which is deposited on the surface of an article placed in its zone; the thickness of the coating depends linearly on the time of the process. The plasma-forming gas was argon and the anode was an AV-200 aluminum wire with a diameter of 2 mm. Studies were made of the effect of current strength, the size of the arc gap, and the consumption and pressure of the plasma-forming gas on the density of the sprayed layer and the strength of its bond with the graphite. The following parameters were found to be optimum:  
 Card 1/2  
 \*Original Journal states designation is AV-200, 17 2  
 UDO: 546.171:546.621

L 11907-66

ACC NR: AP6001921

3  
voltage--65 volts; current strength--90 amp; arc gap--7 mm; argon rate--30 liters/min; argon pressure--1 atm; feeding speed of wire--6.5 meters/min; and, distance of the nozzle from the sprayed surface--200 mm. Nitriding of the aluminum layer was done in a tubular graphite resistance furnace in a nitrogen atmosphere. The samples were placed in the furnace at a temperature of 500°0, and the maximum nitriding temperature was 1000-2000°0. The heating rate was 9.10 degrees/min. Various temperature conditions were studied and the results are shown in a table with detailed descriptions of the coatings obtained. "The authors express their thanks to Corresponding Member of the AN UkrSSR G.V. Samsonov for his valuable advice on the carrying out of our work." Orig. art. has: 44 55  
2 figures and 1 table.

SUB CODE: 20,11/ SUBM DATE: 15Jan65/ ORIG REF: 002/ OTH REF: 004

Card 2/2

SAMSONOV, G. V.; SLEPTSOV, V. M.; KRASNOV, A. N.; PRSHEDROMIRSKAYA, Ye. M.

"Methoden zur erzeugung kugeliger teilchen hochschmelzender metalle under verbindungen."

report submitted for 3rd Intl Conf on Powder Metallurgy, Eisenach, E. Germany, 13-15  
May 1965.  
Kiev, UKSSR.

KRASNOV, A.N., inzh.; SLEPTSOV, V.M., inzh.

Plasma coating of high-melting alloys. Mashinostroenie no.4:87-89  
Jl-Ag '65. (MIRA 18:8)

(N) L 11624-66 EWP(e)/EWT(m)/ETC(F)/EPF(n)-2/ENG(m)/EWA(d)/T/EWP(t)/EWP(n)/  
 ACC NR: AP6001472 EWP(b)/EWA(c) LJP(c) SOURCE CODE: UR/0226/65/000/012/0039/0044  
 JD/WJ/JQ/AT/WH  
 AUTHOR: Burykina, A. L.; Krasnov, A. N.; Yevtushok, T. H. 73  
 69  
 ORG: Institute of the Problems of the Science of Materials AN UkrSSR (Institute B  
 materialovedeniya AN UkrSSR)  
 TITLE: Plasma-sprayed diffusion coatings on graphite 6, 44  
 SOURCE: Poroshkovaya metallurgiya, no. 12, 1965, 39-44  
 TOPIC TAGS: graphite, metal coating, plasma sprayed coating, diffusion coating,  
 copper coating, aluminum coating, niobium coating, tungsten coating  
 ABSTRACT: Plasma coating of graphite with copper, aluminum, Nichrome, molybdenum,  
 tungsten, and silicon by spraying or vacuum diffusion has been investigated, and  
 the effect of various technological parameters on the structure of the obtained  
 coatings has been determined. In plasma spraying, adhesion of the metal layer to  
 graphite was found to result from imbedding of metal particles into the graphite  
 surface. The coatings had a 10-14% porosity and were readily machinable. Multi-  
 layer coatings (Ni-Al, Al-Cu-Ni, brass-Al, Cu-Ni, Al-Mo, Al-W) were also obtained  
 by plasma arc spraying. Diffusion coatings were produced by pack cementation in a  
 vacuum of 0.133-0.0133 n/m<sup>2</sup> at a temperature 50-100C higher than the melting  
 temperature of the metal and holding time of 5-7 min. The densest, most strongly  
 adhering coatings were obtained on the least porous graphite. After annealing at  
 1500C for 1 hr, titanium coating had a two-layer structure: an inner layer of  
 Card 1/2

L 11624-66

ACC NR: AP6001472

titanium carbide containing about 11% C, and an external layer consisting of a solid solution of carbon in titanium. With increasing annealing time to two hours, the external layer was transformed to titanium carbide of stoichiometric composition (20.01% C). A zirconium coating, up to 50  $\mu$ m thick, obtained by cementation at 1950C, was transformed into a single-phase zirconium-carbide coating by annealing at 1800C for 2 hr. The niobium coating had a two-phase structure: niobium carbide ( $Nb_2C$ ) with a hardness of  $2263 \text{ dan/mm}^2$ , and a solid solution of carbon in niobium with a hardness of  $282 \text{ dan/mm}^2$ . Diffusion annealing at 1700—1900C gradually transformed the solid solution to carbide and increased the concentration of carbon in the remaining solid-solution layer. Dense, strongly adhering, silicon-carbide coatings 200—250  $\mu$ m thick were obtained by cementation for 1.5 hr in a hydrogen atmosphere at 1600C followed by annealing at 2200C or 2300C (to transform  $\beta$ -SiC to  $\alpha$ -SiC) for 1.5 hr. Coatings on denser graphite had a microhardness of  $3300 \pm 120 \text{ dan/mm}^2$ , and  $33190 \pm 100 \text{ dan/mm}^2$  on a less dense graphite after annealing at 2200C. The corresponding figures for coatings annealed at 2300C were  $4120 \pm 207$  and  $3865 \pm 202 \text{ dan/mm}^2$ . Orig. art. has: 3 figures and 3 tables.

[MS]

SUB CODE: 11, 13/ SUBM DATE: 29Mar65/ ORIG REF: 003/ OTH REF: 002/ ATD PRESS:

4177

Card 2/2

KRASNOV, A.N.; SLEPTSOV, V.M.

Arc plasma in the metallurgy of ceramic metals. Porosh. met. 5  
no.1:79 Ja '65. (MIRA 18:10)

1. Institut problem materialovedeniya AN UkrSSR.



*KRASNOV, A.P.*

KRASNOV, A.P., inzh.-ekonomist

Al'met'yevsk in the sixth five-year plan. Neftianik 1 no.6:33-34  
Je '56. (MIRA 10:12)

(Al'met'yevsk--Petroleum industry)

KRASNOV, A.P.

Gas torches shall be extinguished. Neftianik 1 no.7:31 J1 '56.  
(Gas, Natural) (MLBA 9:11)

KRASNOV, A.

In a new oil field. Neftianik 1 no.8:32 Ag '56.

(MLRA 9:11)

(Al'met'yevo--Oil fields)

KRASNOV, A.

~~The first completed section of the sixth five-year plan.~~

Neftianik 1 no.8:34 Ag '56.

(MLRA 9:11)

(Al'met'yev--Petroleum--Pipelines)

KRASNOV, A.P.

Some cultural and everyday needs of a new petroleum workers' town.  
Neftianik 1 no.11:33-34 N '56. (MLRA 9:12)  
(Petroleum workers)

~~KRASNOV, A.~~ inzhener.

Efficient method of emptying aircraft oils from tank cars. Grazhd. av.  
13 no. 10:22 O '56. (MIRA 10:1)  
(Tank cars)

KRASNOV, A.

New settlement of petroleum workers of the Tatar A.S.S.R. Neftianik  
2 no.1:30 Ja '57. (MLRA 10:2)  
(Aktyubinskiy--Petroleum workers)

KRASNOV, A.

Clay powder plant in Al'met'evsk. Neftianik 2 no.7:32 J1 '57.

(MIRA 10:8)

(Al'met'evsk--Oil well drilling fluids)



KRASNOV, A.

The Al'met'yevsk-Asnakayevo-Subkhankulovo petroleum pipeline. Dokl.  
AN Arm.SSR 24 no.2:35 '57. (MLRA 10:4)  
(Tatar A.S.S.R.--Petroleum--Pipelines)  
(Tatar A.S.S.R.--Gas,Natural--Pipelines)

11(2)

SOV/92-58-11-33/36

AUTHOR: A. Krasnov

TITLE: Gas Flares Are Dying Off (Gasnut gazovyye fakela)

PERIODICAL: Neftyanik, 1958, Nr 11, 32 (USSR)

ABSTRACT: The author states that two years ago oil well gas, which is a valuable fuel and raw material for the chemical industry, was still flared in the Al'met'yevsk region. Since then, the situation has changed and this gas is now brought by the Mannibayevo-Kazan' gas line to industrial and residential buildings of the Tatar Republic. The construction of the Kazan'-Gorkiy gas line is now finished, and gas is supplied to the largest industrial center of the Volga region. The construction of the gas gathering network near Al'met'yevsk is also completed, and a number of towns will soon receive gas. The second set of units at the Mannibayevo natural gasoline plant is under construction. This plant will soon yield raw material to be used in synthetics production.

Card 1/1

KRASHOV, A.

Production standards survey. Sov.profsoluzi 7 no.20:48  
O '59. (MIRA 12:12)

1. Predsedatel' postroykoma 5-go stroyrayona tresta "Al'met'-  
yevneftestroy."  
(Oil well drilling--Technological innovations)

KRASNOV, A.

Priority of Russian specialists ("Fedor Priadunov and his  
petroleum plant" by K.Kostrin). MTO 2 no.11:59 N '60.  
(MIRA 13:11)

(Ukhta--Petroleum industry)  
(Kostrin, K.)

KRASNOV, A.

Purify bodies of water in the oil regions of the Tatar  
A.S.S.R. Neftianik 5 no.8:24 Ag '60. (MIRA 14:8)  
(Tatar A.S.S.R.---Oil pollution of rivers, harbors, etc.

KRASNOV, A., inzh.

Needed automation of oil storage. NTO 3 no. 1:10-11 Ja '61.  
(MIRA 14:2)

(Oil storage) (Automation)

KRASNOV, A.; BERENSON, S.

Sand improves lubrication. Tekh. mol. 29 no.12:17 '61.  
(MIRA 15:1)

(Lubrication and lubricants)

L 47003-66 EWT(m)/EWP(j)/T IJP(c) WW/RM SOURCE CODE: UR/0191/66/000/008/0056/0050  
 ACC NR: AP6027283 (A) 43  
 B

AUTHOR: Korshek, V. V.; Slonimskiy, G. L.; Vinogradova, S. V.; Gribova, I. A.;  
 Askadskiy, A. A.; Krasnov, A. P.; Chumayovskaya, A. N.; Moldabayeva, M. K.

ORG: none

TITLE: Effect of fillers on the properties of compositions based on heat-resistant polymers

SOURCE: Plasticheskiye massy, no. 8, 1966, 56-58

TOPIC TAGS: filler, polymer physical property, impact strength, hardness

ABSTRACT: The effect of fillers (powdered copper and aluminum, talc, quartz, graphite and boron nitride added in amounts of 20, 40, 60, 80 and 90 wt. %) on the specific impact strength and hardness of compositions based on F-1 polyarylate (prepared from phenolphthalein and isophthalic acid) and FF-40 phenolphthalein-formaldehyde resin was studied. The compositions based on F-1 showed a decrease in impact strength with increasing content of all fillers, probably because the filler particles hinder the development of fibrillar superstructures and make the polymer structure inhomogeneous, thus impairing its properties. The specific impact strength of specimens based on FF-40 was higher for all fillers than that of the original specimens, the metal powders having a greater effect than the mineral fillers. The hardness curves for F-1 showed maxima in the case of the metal powders, quartz, and boron nitride; the existence of

UDC: 678.6.01:536.495]:678.046.2/.3

Card 1/2



L 47008-66

ACC NR: AP6027283

these maxima is explained. Talc did not increase the hardness of F-1 in any amount.  
The hardness of FF-40 was greater for all fillers than that of F-1 specimens. Orig.  
art. has: 5 figures.

SUB CODE: 11, IC/ORIG REF: 002

Card 2/2 vmb

L 01040-67 EWT(m)/EWP(j)/T IJP(c) WW/RM

ACC NR: AP6019546

SOURCE CODE: UR/0190/66/008/006/1109/1112

AUTHOR: Slonimskiy, G. L.; Askadskiy, A. A.; Korshak, V. V.; Vinogradova, S. V.; Gribova, I. A.; Chumayevskaya, A. N.; Krasnov, A. P.; Moldabayeva, M. K.

ORG: Institute of Organoelemental Compounds, AN SSSR (Institut elementoorganicheskikh soyedineniy AN SSSR)

TITLE: Investigation of the relaxation properties of filled polyarylates

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 8, no. 6, 1966, 1109-1112

TOPIC TAGS: solid mechanical property, polymer rheology, polyaryl plastic, synthetic material, POLYARYLATE, FILLER

ABSTRACT: Relaxation properties of commercial F-1 polyarylate filled with copper powder (0-80 wt %) were examined in the 140°-260°C temperature range and in the 50-600 kg/cm<sup>2</sup> load range. The object of the study was to fill the gap in the pertinent literature. The temperature dependence of the relaxation time for F-1 polyarylates with various copper contents is graphed. It was found that in up to 40 wt % copper, the overall activation energy of the relaxation of the copper filled F-1 polyarylate decreases (in comparison to the unfilled F-1 polyarylate) with increasing copper content. For the 40-80 wt % copper range, the overall activation energy of relaxation increases with increasing copper content. Changes in the activation energy of relaxation as a

UDC: 678.01:53+678.674

Card 1/2

L 01040-67

ACC NR: AP6019546

function of copper content in F-1 polyarylate are graphed. Orig. art. has: 5 figures,  
1 formula.

SUB CODE: 07,11/

SUBM DATE: 09Jun65/

ORIG REF: 007

8WM

Card 2/2

BRASLAVSKIY, Aleksandr Petrovich; SHERGINA, Klavdiya Borisovna;  
Prinimala umnost'yes: KAPITANOVA, N. P.; NURGALIYEV, S. N.;  
CHURAYEV, V. F.; KOROTKIKH, G. V.; KRASHOV, S. A.; KOVALEVA,  
I. F., red.

[Water losses by evaporation from reservoirs of the arid  
zone of Kazakhstan, based on the example of the Kengir  
Reservoir] Poteri vody na ispareniye iz vodokhranilishch  
zasushlivoi zony Kazakhstana na primere Kengirskogo vo-  
dokhranilishcha. Alma-Ata, Kazak: 1965. 105 p.  
(MIRA 12:10)